Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Advanced Television Systems	)	
and Their Impact upon the	)	MB Docket No. 87-268
Existing Television Broadcast	)	
Service	)	
	)	

PETITION FOR RECONSIDERATION OF
COMMUNITY TELEVISION OF SOUTHERN CALIFORNIA

Community Television of Southern California ("CTSC"), licensee of non-commercial, educational public television Station KCET, Los Angeles, California, hereby requests that the Commission reconsider its decision in the above-captioned proceeding denying CTSC's request to change the facilities specified for Station KCET in the DTV Table of Allotments[1] and grant CTSC authority to operate Station KCET on DTV Channel 28 post-transition with its existing Andrew Model 35E4 antenna (FCC Antenna ID No. 17555) at its current HAAT, 926 m, and with sufficient ERP to replicate its current NTSC service area. As explained below, the facilities specified in the DTV Table of Allotments would force CTSC to chose between operating post-transition with facilities that would serve only a fraction of KCET's current NTSC and DTV population or incurring the substantial cost to acquire and install a custom designed antenna. Neither would serve the public interest, nor is either necessary, as CTSC can operate Station

[1] *In re Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service*, Seventh Report and Order and Eighth Further Notice of Proposed Rule Making, MB Docket No. 87-268, FCC 07-138, Appendix B (rel. Aug. 6, 2007) ("*7th Report and Order*").

KCET post-transition using the facilities proposed in this Petition without causing impermissible interference to any other television station. In fact, the proposed facility will cause 1.8% less interference than KCET's Appendix B facility to the critical Santa Barbara FCD27 allotment.

Background

Station KCET, which operates its NTSC facility on Channel 28, received an out-of-core transitional DTV assignment on Channel 59. CTSC has always intended to return to Channel 28 after the DTV transition, both because of its identification in the community as Channel 28 and because it would be able to continue using its existing Andrew Model 35E4 antenna, thereby saving the cost of a new antenna — a very important consideration for a public broadcaster like CTSC.[2]

During the channel selection process, CTSC indicated that it would maximize its facilities[3] and specified Channel 28 as its post-transition channel.[4] The Commission subsequently disapproved CTSC's election of Channel 28 with maximized facilities, citing interference caused to Station KEYT-DT, Channel 27, Santa Barbara, CA. Ultimately, CTSC elected to replicate its existing facilities on Channel 28 in order to retain the channel rather than risk being forced to accept a less desirable allotment.[5]

When the Commission released its *7th Further Notice*, it granted CTSC's request to operate on Channel 28 post-transition, but specified the use of Station KCET's Channel 59

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2 CTSC estimates that a new antenna conforming to the Appendix B pattern would cost between $200,000 and $500,000.

3 FCC File No. BCERET-20041105ADB, filed Nov. 5, 2004, referencing FCC File No. BMPEDT-20000428ADF.

4 FCC File No. BFREET-20050121ALB, filed Jan. 21, 2005.

5 FCC File No. BFRCET-20050815ABG, amended Sept. 19, 2005. *See also* Letter dated October 7, 2005 from Maureen Jeffreys, Esq., Counsel for CTSC, to Ms. Marlene Dortch, Secretary, FCC.

antenna pattern, modified for use on Channel 28.[6] However, as indicated in the attached Engineering Statement of Hammett & Edison, Inc., Consulting Engineers ("Engineering Statement"), that antenna has a very different pattern than CTSC's existing Channel 28 Andrew antenna. In fact, the Channel 59 antenna has a lobe oriented toward Santa Barbara while the Andrew antenna has a null in that direction.

CTSC filed Comments in response to the *7th Further Notice* in which it sought maximized facilities on Channel 28, and submitted an engineering analysis demonstrating that operation with its proposed maximized facilities would not cause unacceptable interference to Station KEYT-DT. At the time, CTSC did not realize that the Commission had specified the modified Channel 59 antenna and did not expressly note that the proposed DTV Table specified the wrong antenna. CTSC's engineering analysis was performed using the Channel 28 Andrew antenna, which CTSC has always intended to use for its post-transition facility, not the modified Channel 59 antenna pattern.[7] The Commission denied CTSC's request on the grounds that, based on the modified Channel 59 antenna, CTSC's proposal would cause interference to Station KEYT-DT.[8]

On review of Commission's decision, CTSC realized that its request for modifications to the Table of Allotments had been based on its Channel 28 Andrew antenna whereas the Commission's analysis had been based on the modified Channel 59 antenna.[9] CTSC also

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6 *See 7th Further Notice*, Exhibit B at 59. Exhibit B specified that Station KCET should operate with an ERP of 107 kW.

7 *In re Advanced Television Sys. & Their Impact Upon the Existing Television Broad. Serv.*, MB Docket No. 87-268, Comments of Community Television of Southern California (filed Jan. 25, 2007).

8 *See 7th Report and Order*, ¶ 135.

9 CTSC also realized that the use of the different antennas explained why the Commission found that its proposed maximized facilities would cause interference to Station KEYT-DT,

Footnote continued on next page

realized that, unless the DTV Table of Allotments is modified, the Commission's freeze on filing television applications would preclude it from replicating Station KCET's current NTSC or DTV service areas unless it were to purchase a custom-built antenna to replicate, on Channel 28, the pattern of Station KCET's current Channel 59 DTV antenna. However, requiring CTSC to purchase a new antenna would force it to divert extremely limited financial resources from programming and other services to its community, to the detriment of its public broadcasting mission. Moreover, there is no assurance that such an antenna could be designed, constructed, tested, delivered, and installed by the transition deadline, or that the tower could support it.

Since Station KCET can operate post-transition with its current Andrew antenna without causing impermissible interference to others, CTSC urges the Commission to reconsider its action in the *7th Report and Order* and modify the DTV Table of Allotments to allow Station KCET to replicate its NTSC service area using its current Andrew antenna.

The Commission Should Modify Its DTV Table of Allotments to Allow Station KCET(DT) to Replicate its NTSC Service Area

As demonstrated above, CTSC's intention to operate on Channel 28 post-transition using its current Channel 28 antenna was not effectively communicated to the Commission, and the Commission, referencing Station KCET's Channel 59 DTV facilities, specified a modified Channel 59 antenna in the Table of Allotments. Since the antenna patterns of the two antennas

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Footnote continued from previous page
while CTSC's engineering analysis did not. CTSC currently has pending a Petition for Reconsideration of the Commission's May 18, 2007 Extension Order denying its request for an extension of its maximization construction permit. *In re DTV Build-Out: Applications Requesting Extension of the Digital Television Construction Deadline,* Petition for Reconsideration of Community Television of Southern California, File No. BEPEDT-20060123AFG (June 18, 2007). CTSC may supplement that Petition in light of this new understanding concerning the antenna to be used and the instant Petition, pending further interference analysis.

differ significantly, the freeze on filing television applications will severely limit the area Station KCET can serve if it attempts to use the Andrew antenna. As the Engineering Statement demonstrates, Station KCET would be required to operate with an ERP of 0.8 kW and, due to massive interference from the Channel 29 allotment in Ontario, California, Station KCET would serve only 820,456 viewers with interference-free service,[10] compared to the more than 12.6 million with its NTSC facility and its existing Channel 59 DTV facility.[11] The reduced facility would not even provide city-grade coverage to all of Los Angeles, and thus would prevent KCET from serving many of its existing low income, ethnically diverse viewers who can only receive KCET's educational programming by way of over the air broadcast.[12] This huge loss of viewers at the DTV transition deadline also would be economically devastating for CTSC.

That result, which would be directly contrary to the public interest, is entirely unnecessary. As shown by the attached Engineering Statement, Station KCET operating at an ERP of 107 kW will provide coverage that replicates the service area of KCET's Channel 28 NTSC facility without causing impermissible interference to any other station.[13]

During the channel election process, stations choosing a post-transition channel other than their transition DTV channel were granted the elected facilities if the facilities would cause no more than 0.1% new interference to other stations.[14] In the *7th Report and Order*, the Commission granted proposed changes to Appendix B if they did not create new post-transition

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10 *See* Exhibit A at 1 and Figs. 1A, 1B.

11 *See In re Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service*, Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order, 13 FCC Rcd. 7418, Appendix B, p. B-5 (1998)

12 *See* Exhibit A at 1 and Figs. 1A, 1B.

13 *Id.* at 1–3 and Figs. 4A–4F, 5A–5F.

14 *7th Report and Order* at ¶ 19 and n.39.

interference to a TCD of more than 0.1%.[15] For stations with only one in-core channel returning to their in-core NTSC channels, the Commission decided that a 2.0% new interference limit was appropriate to allow these stations to replicate their existing coverage.[16] Because KCET has only one in-core channel, it is entitled to use the alternative 2% new interference standard for replication facilities on Channel 28.

The replication facility proposed here by CTSC meets both criteria. It will cause no more than 0.55% interference to any station.[17] Furthermore, the proposed facility will not cause more than 0.1% new interference to any other DTV station. In fact, it is predicted to cause 1.8% less interference than KCET's Appendix B facility is predicted to cause to the critical Santa Barbara FCD27 allotment, and 0.4% less to the Ontario, California FCD29 allotment.[18] Thus, allowing Station KCET to operate as proposed here is fully consistent with the Commission's allocation rules for post-transition operation.

Further, grant of this Petition will manifestly serve the public interest. It will assure that Station KCET, one of the leading public television stations in the nation providing both substantial amounts of local programming to the Los Angeles community and national public television programming distributed by PBS, will be able to continue serving the Los Angeles community as it has for more than 40 years. In so doing, the Commission will also further its

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15 *7th Report and Order* at ¶ 26.

16 *Id.* at ¶ 20; *see also DTV Channel Election: First Round Conflict Decision Extension and Guidelines for Interference Conflict Analysis*, Public Notice, DA 05-2233, 2–3 (August 2, 2005) ("the staff intends to approve such in-core elections [i.e., by stations with only one in-core channel] if they do not cause more than 2.0% additional interference to other stations (based on their DTV replication facilities, not their maximized facilities)").

17 Using higher-resolution 1 km x 1 km cells for the analysis, the predicted interference is 0.37%. *See* Exhibit A at 1.

18 *See* Exhibit A at 1–3 and Figs. 4A–4F, 5A–5F.

own goals for the DTV transition by assuring "that the final channel allotments accommodate replicated and maximized serves areas for those stations certifying their intent to serve such areas."[19]

Without the relief sought here, CTSC would be forced to accept inferior and inadequate coverage mandated by the freeze or to incur the substantial costs of purchasing a new antenna that would provide the pattern specified in Appendix B. Imposing this cost, estimated to be between $200,000 and $500,000, would severely tax CTSC's already-strained budget for the DTV conversion as well as its general operating funds — with no corresponding public benefit. As is the case for many public television licensees, CTSC is facing serious financial difficulties, requiring it to cut back on staff and undertake other economies. Diverting funds to acquire a unique antenna will materially aggravate that problem and potentially adversely affect CTSC's ability to continue offering the range and variety of services currently enjoyed by its audience.

Further, there is no assurance that such an antenna could be designed, constructed, tested, delivered, and installed by the statutory transition deadline, or that the tower could support it in addition to the existing Channel 28 and Channel 59 antennas. Since Station KCET's current digital channel is out-of-core, it would not have the option, which the Commission has proposed giving stations with in-core pre-transition channels, to remain on its pre-transition channel after February 17, 2009.[20] Therefore, denying this request could potentially force Station KCET to

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[19] *In re Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service,* Second Periodic Report and Order, MB Docket No. 03-15, 19 FCC Rcd. 18279, 18291 ¶ 31 (2004).

[20] *See In re Third Periodic Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television,* Notice of Proposed Rulemaking, MB Docket No. 07-91, ¶ 90 (rel. May 18, 2007).

operate with an ERP of 800 watts post-transition while it awaits delivery of a new, custom antenna.

There is a compelling public interest benefit in such a result. Station KCET can serve its current NTSC service area with a post-transition facility using the existing Channel 28 Andrew 35E4 antenna without causing impermissible interference to any station and without incurring the burdensome cost of a custom antenna. Accordingly, CTSC respectfully requests that the Commission grant this petition and change Appendix B to specify post-transition operation for Station KCET on Channel 28 with 107 kW ERP using the existing Andrew Model 35E4 antenna, Antenna ID No. 17555, at a HAAT of 926 m. Granting CTSC's request will serve the public interest by permitting viewers in the expanding Los Angeles metropolitan area to continue receiving Station KCET's free, over-the-air, high-quality public television programming and services without causing impermissible interference to any other station.

CONCLUSION

For the reasons set forth above, CTSC respectfully requests that the Commission grant this petition and change Appendix B to reflect post-transition operation for KCET on Channel 28 with 107 kW ERP using the existing Andrew Model 35E4 antenna, Antenna ID No. 17555, at a HAAT of 926 m.

Respectfully submitted,

/s/

Theodore D. Frank
Donald T. Stepka
Arnold & Porter LLP
555 Twelfth Street, N.W.
Washington, DC 20004
Counsel for Community Television of Southern California

October 26, 2007

Exhibit A

Engineering Statement of Hammett & Edison, Inc., Consulting Engineers

Station KCET-DT • N28/D59/FCD28 • Los Angeles, California
MB Docket 87-268 Seventh R&O Petition for Reconsideration

Statement of Hammett & Edison, Inc., Consulting Engineers

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained by Community Television of Southern California (CTSC), licensee of noncommercial TV Stations KCET, N28/D59/FCD28, Los Angeles, California, to prepare an engineering statement in support of a Petition for Reconsideration of the Seventh Report and Order (R&O) to MB Docket 87-268.

Use of Existing NTSC Channel 28 Antenna Pattern and Height

In the Seventh R&O, KCET was assigned an effective radiated power (ERP) of 107 kW, but based on a replication pattern derived from the KCET-DT, D59, transitional antenna pattern and height (1,812 m AMSL/913 HAAT). Because of the August 3, 2004, "Freeze" order, and as shown by the attached Figure 1A, if KCET were to operate its post-transition Final Channel Designation (FCD) 28 facilities using its existing Channel 28 transmitting antenna, an Andrew Model 35E4 directional antenna, it would have to limit its DTV ERP to a mere 800 *watts* so as not to extend its DTV Threshold contour. As shown by the attached Figure 1B, if KCET-DT were to so drastically reduce its DTV ERP, it would then suffer massive adjacent-channel interference from Station KFTR-DT, D29, Ontario, California. While the resulting KCET-DT FCD28 terrain-limited population would be almost twelve million persons (2000 Census), its interference-free population would then be less than one million persons. The reason for this tremendous power penalty is shown in Figure 2, which compares the FCD28 Appendix B replication pattern (FCC Pattern Number 70607) to the licensed KCET(TV), N28, pattern (FCC Pattern Number 17555); while the FCD28 Appendix B pattern has a null towards 15°T, this is a pattern maxima for the KCET N28 Andrew Model 35E4 antenna.

If, instead, the KCET-DT FCD28 facilities were to be based on use of the existing NTSC Channel 28 antenna and height (1,825 m AMSL/926 m HAAT), that is, the Andrew Model 35E4 directional antenna, and having a main beam ERP of 107 kW, the FCD28 DTV Threshold contour would then be comparable to the exiting KCET, N28, Grade B contour, as shown by the attached Figure 3. As shown by the attached Figure 4, an OET-69 interference study for KCET-DT, FCD28, and using the Appendix B FCD28 replication pattern, the predicted interference to KEYT-DT, FCD27, Santa Barbara, CA is 2.37%, and the predicted interference to KFTR-DT, FCD29, Ontario, CA, is 0.51%. As shown by the attached Figure 5, an OET-69 interference study for KCET-DT, FCD28, but using the Andrew Model 35E4 pattern and height, the predicted interference to KEYT-DT becomes 0.55%, and the predicted interference to KFTR-DT becomes 0.11%. Thus, the incremental interference to KEYT-DT would be *minus* 1.82%, and the incremental interference to KFTR-DT would be *minus* 0.40%. That is, the predicted interference to both stations would *decrease*, thus meeting the incremental interference limit of plus 0.1%.

Using OET-69 methodology, the existing KCET, N28, land area and interference-free population is 13,476 square kilometers and 13,322,390 persons (2000 Census). For KCET-DT, FCD28, at 107 kW ERP using the Andrew 35E4 N28 antenna pattern and height, the land area and interference-free population would be 16,034 square kilometers and 13,908,173 persons (2000 Census).

Seventh R&O Precedents

The August 6, 2007, Seventh R&O, included the following appendices which modified a total of 211 stations:

Appendix	Number of Stations
D1, Granted Requests for Minor Adjustments	22
D2, Granted Requests for Changes to Certification Criteria that meet the interference criteria	129
D3, Granted Requests for Modified Coverage Area	30
D5, Granted Requests for Alternative Channel Assignments	13
D6, Requests for Changes to Appendix B Antenna Information	17

Yet, although the Commission granted modifications to 211 tentative channel designations (TCDs), it apparently did not consider KCET's request in its Seventh Further Notice of Proposed Rulemaking (Seventh FNPRM) comments to have its FCD based on its NTSC Channel 28 antenna pattern and height. This became clear only when the Office of Engineering and Technology (OET) posted on its web site* data summaries for the FCD studies. The entry for KCET showed not the NTSC antenna HAAT of 926 m, but rather the D59 HAAT of 913 m. It can therefore be concluded that rather than studying the N28 antenna pattern and height as was requested in the engineering exhibit submitted with the KCET Seventh FNPRM comments, the D59 replication pattern and height were instead studied. This is highly significant, since towards KEYT-DT FCD27, the N28 pattern has 6.5 dB less power than the FCD28 Appendix B replication pattern.

Summary

In its comments to the Seventh FNPRM, KCET proposed use of its existing Andrew Model 35E4 Channel 28 NTSC antenna, but at a higher ERP of 190 kW. It appears that the Commission instead studied the KCET proposal based on the significantly different FCD28 Appendix B replication pattern. To correct this miscommunication, KCET now asks that the Commission modify the KCET-DT FCD28 facilities to be based on the analog channel 28 antenna pattern and height. Using the existing antenna and height and an ERP of 107 kW will replicate KCET's NTSC Service and will *decrease* the predicted interference to both KEYT-DT, FCD27, and to KFTR-DT, FCD29. Such action would

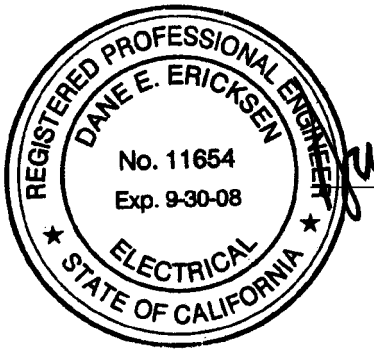
* See http://www.fcc.gov/oet/dtv/dtv_apps.html.

additionally ensure that KCET-DT would not receive debilitating interference from KFDR-DT, D29, Ontario, CA.

List of Figures

In carrying out these engineering studies, the following attached figures were prepared under my direct supervision:

1. FCD28 Appendix B DTV contours versus no-contour extension using the KCET, N28, Andrew Model 35E4 transmitting antenna and height
2. Comparison of the FCD28 Appendix B replication pattern and the KCET, N28, Andrew Model 35E4 pattern
3. Map showing KCET, N28, Grade B contour versus FCD28 DTV Threshold contour at 107 kW ERP, and using the existing Andrew Model 35E4 Channel 28 transmitting antenna
4. OET-69 interference study for KCET-DT, FCD28, at 107 kW ERP using the FCD28 Appendix B replication pattern and height
5. OET-69 interference study for KCET-DT, FCD28, at 107 kW ERP and using the existing Andrew Model 35E4 Channel 28 transmitting antenna.

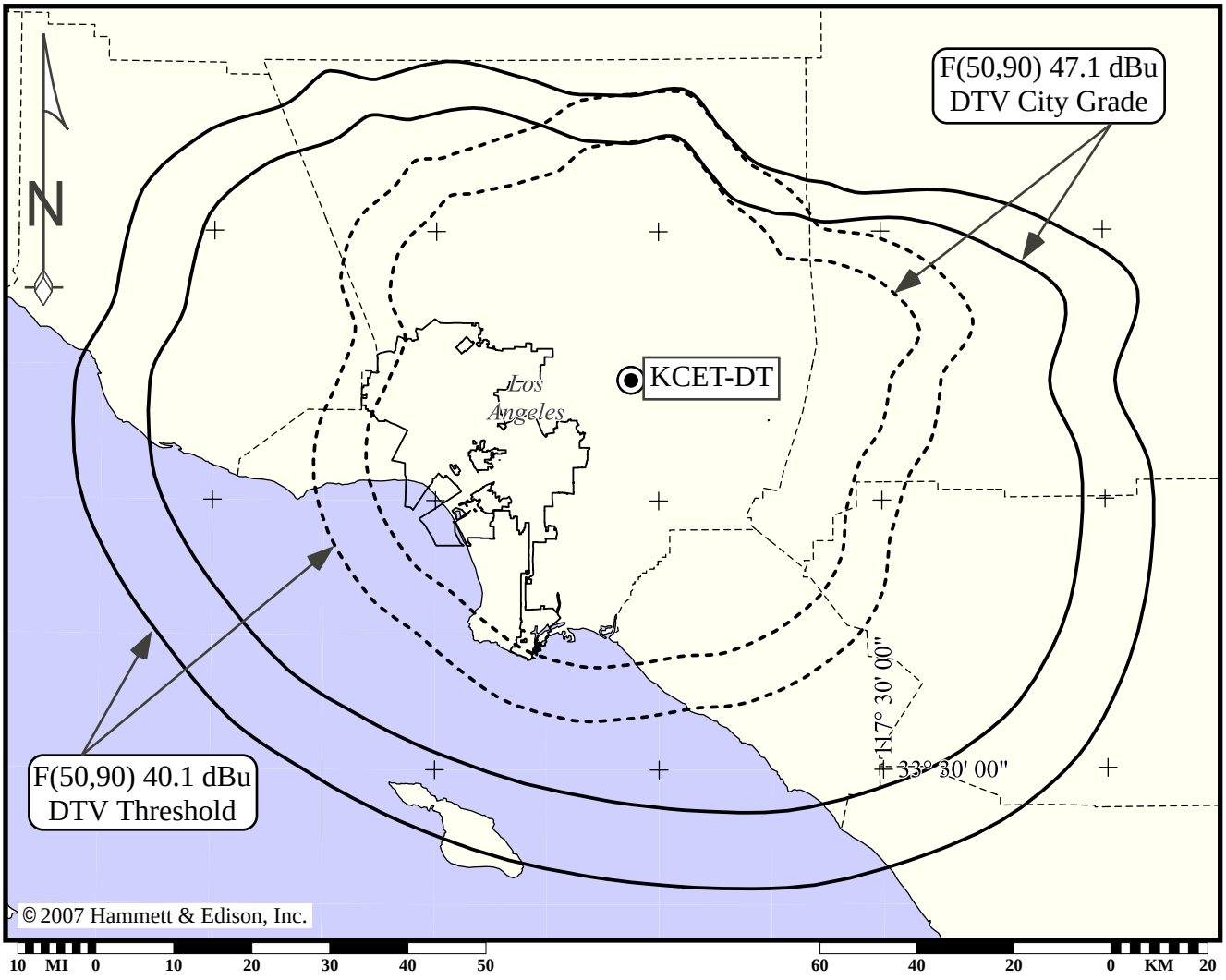


Dane E. Ericksen, P.E.

October 25, 2007

TV Station KCET • N28/D59/FCD28 • Los Angeles, California
MB docket 87-268 Seventh R&O Petition for Reconsideration

KCET-DT, FCD28 Appendix B (107 kW) DTV Contours
versus DTV Contours Using Existing KCET(TV), N28, Andrew Model 35E4
Antenna Pattern and Height (800 W ERP)



——— = FCD28, 107 kW
---------- = D28, N28 pattern & height, 800 W ERP

City Grade coverage of Los Angeles at 800 W DA would be 95.4% based on area, 97.9% based on population (2000 Census)

Lambert conformal conic map projection. Map data taken from Sectional Aeronautical Charts, published by the National Ocean Survey. Geographic coordinate marks shown at 30-minute increments. City limits shown taken from U.S. Census Bureau TIGER/Line 2000 data.

TV Station KCET • N28/D59/FCD28 • Los Angeles, California
MB Docket 87-268 Seventh R&O Petition for Reconsideration

Post-Transition OET-69 Coverage Study for KCET-DT at 800 W ERP (DA)
Based on the Andrew N28 HPLANE Azimuth Pattern and Height

OET-69 Coverage Analysis, 2000 Census
tvstudy v3.2.12

Post-transition study, in-core DTV and LPTV/Class A NTSC only

This interference study is based on 1.00 x 1.00 kilometer cells
and terrain profiles with 10.0 points per kilometer.

Station record parameters:

	--Modified--	--Original--
Station:	D28 KCET TCD	D28 KCET TCD
City:	LOS ANGELES, CA	LOS ANGELES, CA
Facility ID:	13058	13058
Coordinates:	N 34-13-26.0 W 118-03-43.8	N 34-13-26.0 W 118-03-43.8
Height AMSL:	1825.5 m	1812.0 m
Maximum ERP:	0.800 kW	107 kW
Azimuth pattern:	kcetN28.17555az.pat	REP-REPLICATION
Orientation:	0.0	0.0
Elevation pattern:	OET-69 generic	OET-69 generic
Service level:	40.1 dBu	40.1 dBu

			Total IX		Unique IX	
Interfering station			Area,km2	Population	Area,km2	Population
D28	KMPH-TV TCD	VISALIA, CA	0.0	0	0.0	0
D29	KFTR-TV TCD	ONTARIO, CA	4512.3	10,967,356	4512.3	10,967,356
N27+A	KNLA-LP CP	LOS ANGELES, CA	0.0	0	0.0	0
N28+A	K28FK LIC	SAN LUIS OBISPO, CA	0.0	0	0.0	0

Service conditions	Area,km2	Population
Noise-limited service	11336.4	12,710,787
Terrain-limited service	8572.9	11,787,812
Interference-free service	4060.6	820,456
Longley-Rice errors	4028.1	760,124

Note: The results of the OET-69 algorithm are dependent on the use of computer databases and complex software algorithms, which may vary between computer platforms and installations. Also, while Hammett & Edison, Inc. endeavors to follow official releases and established precedents on the matter, FCC policy on DTV analysis methods changes from time to time. Thus, the results of OET-69 interference and coverage studies are subject to change and may differ from FCC results.

TV Station KCET • N28/D59/FCD28 • Los Angeles, California
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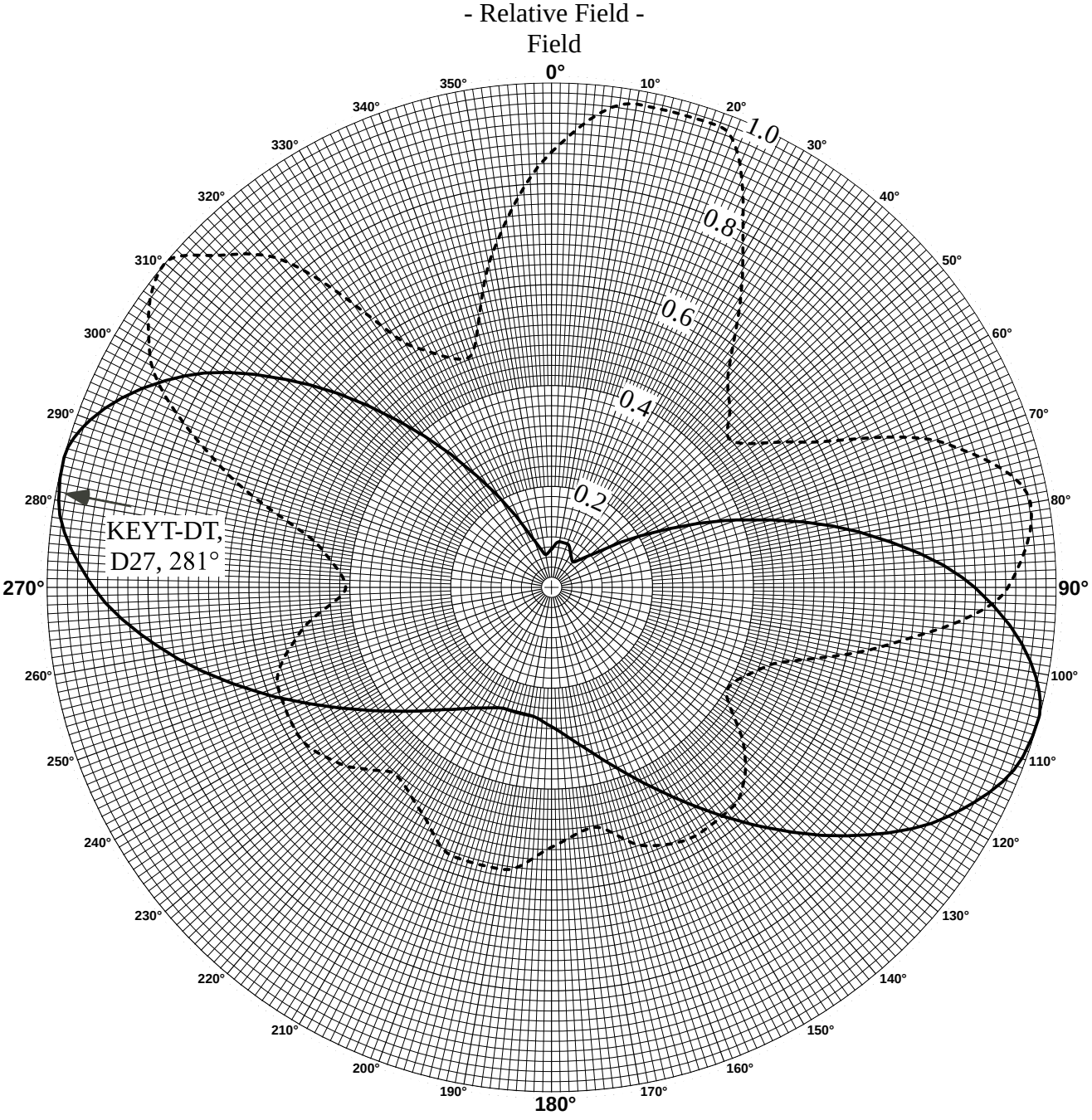
KCET-DT FCD28 Replication Pattern versus Existing KCET, N28, Andrew Model 35E4 Antenna Pattern



——— = FCD28 replication pattern (FCC pattern #70607)
- - - - - - - - - - = N28 Horizontal plane pattern (FCC pattern #17555)

TV Station KCET • N28/D59/FCD28 • Los Angeles, California
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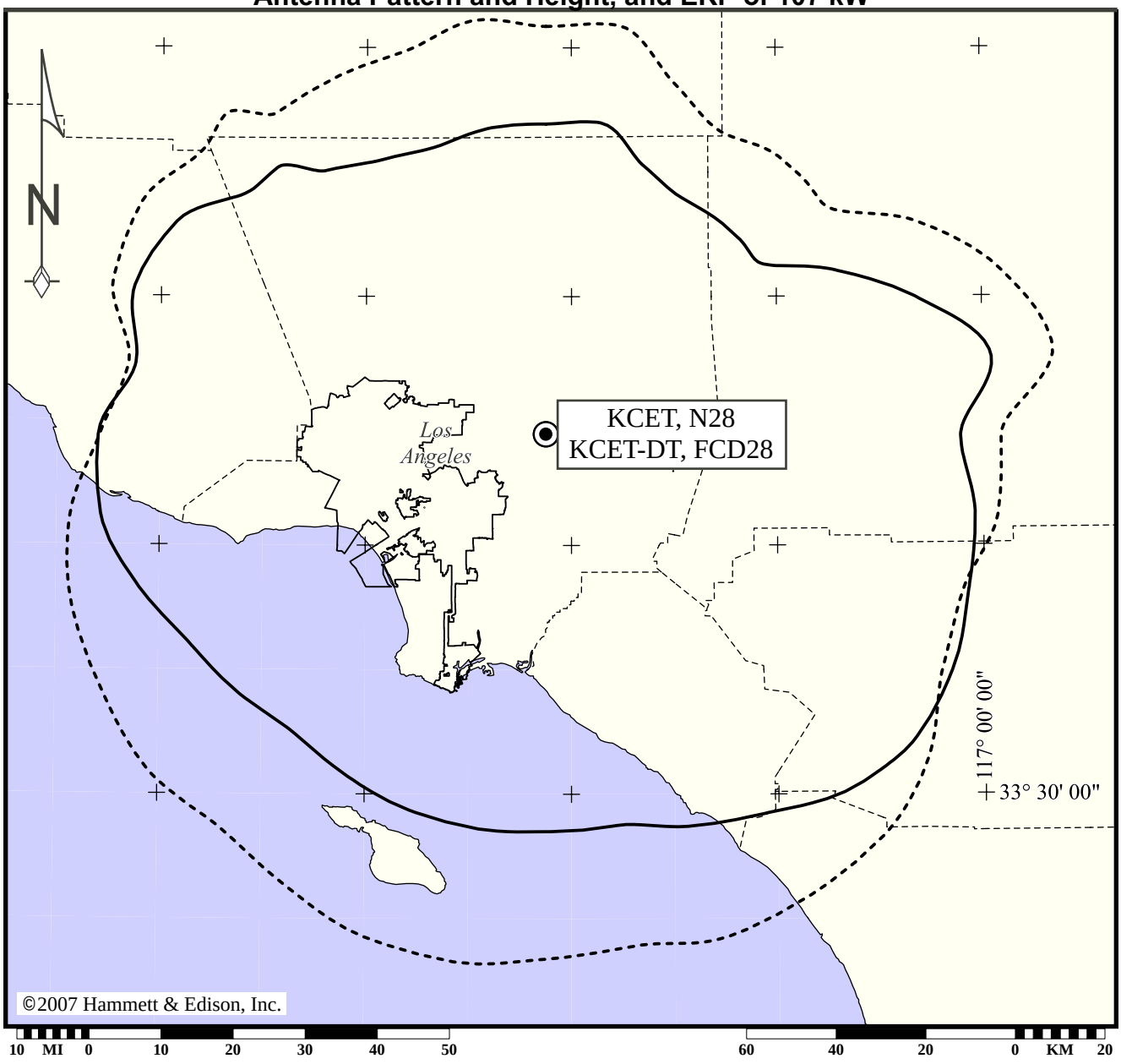
KCET(TV), N28, Grade B Contour versus KCET-DT, FCD28, DTV Threshold Contour Based on Existing Andrew Model 35E4 Antenna Pattern and Height, and ERP of 107 kW



= Dipole-adusted F(50,50) 63.1 dBu Grade B, licensed KCET, 2,450 kW ERP (DA)

= Dipole-adjusted F(50,90) 40.1 dBu DTV Threshold, 107 kW ERP (DA) using existing Andrew Model 35E4 N28 Antenna and Height

Lambert conformal conic map projection. Map data taken from Sectional Aeronautical Charts, published by the National Ocean Survey. Geographic coordinate marks shown at 30-minute increments. City limits shown taken from U.S. Census Bureau TIGER/Line 2000 data.

TCD OET-69 Interference Study for KCET-DT at 107 kW ERP (DA) Using the FCD28 Appendix B Replication Pattern and Height and Based on FCC OET-69 Software Using Default FCC Values of 2 km x 2 km Cells and 1 Point/km Terrain Extraction

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Percent allowed new interference:   0.100
Percent allowed new interference to Class A:   0.100
 Census data selected 2000

 Post Transition Data Base Selected
/space/software/cdbs/tvdb.sff_B
              TV INTERFERENCE and SPACING ANALYSIS PROGRAM


 Date: 10-24-2007    Time: 16:13:14

 Record Selected for Analysis

 KCET     BFRCET    -20050815ABG      LOS ANGELES          CA US
 Channel 28 ERP 107.   kW   HAAT 00913 m  RCAMSL 01812 m
 Latitude 034-13-26  Longitude 0118-03-43
 Status CP        Zone 2    Border
 Dir Antenna Make CDB  Model 00000000070604  Beam tilt Y  Ref Azimuth   0.0
 Last update           Cutoff date           Docket
 Comments
 Applicant COMMUNITY TELEVISION OF SOUTHERN CAL



 Cell Size for Service Analysis 2.0 km/side

 Distance Increments for Longley-Rice Analysis 1.00 km


 Facility meets maximum height/power limits

    Azimuth     ERP        HAAT   41.0 dBu F(50,90)
     (Deg)      (kW)       (m)        (km)
      0.0        0.618     466.7       57.9
     45.0        0.728     410.2       56.8
     90.0       75.320     621.4       98.5
    135.0       45.471    1422.4      116.7
    180.0        7.000    1530.7      100.0
    225.0       11.406    1461.6      103.4
    270.0       84.216    1019.6      112.5
    315.0       27.559     586.0       88.6




                  Evaluation toward Class A Stations


No Spacing violations or contour overlap to Class A stations
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TV Station KCET • N28/D59/FCD28 • Los Angeles, California
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TCD OET-69 Interference Study for KCET-DT at 107 kW ERP (DA)
Using the FCD28 Appendix B Replication Pattern and Height
and Based on FCC OET-69 Software Using Default
FCC Values of 2 km x 2 km Cells and 1 Point/km Terrain Extraction

Class A Evaluation Complete

No spacing violations found to other full service stations

LANDMOBILE SPACING VIOLATIONS FOUND

NONE

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quite zone

Proposed facility OK toward Table Mountian

Proposed facility is beyond the Canadian coordination distance

Proposed facility is within the Mexican coordination distance
Distance to border = 207.0km

Proposed station is OK toward AM broadcast stations

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Start of Interference Analysis

Channel	Call	City/State	ARN	
	Proposed Station			
28	KCET	LOS ANGELES CA	BFRCET	20050815ABG

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
27	KEYT-TV	SANTA BARBARA CA	177.1	CP	BDTV	-00000191
28	KMPH-TV	VISALIA CA	281.4	LIC	BLCDT	-20030204AGN
29	KFTR-TV	ONTARIO CA	0.5	CP	BMPCDT	-20021028ABV

%%%

Analysis of Interference to Affected Station 1

TV Station KCET • N28/D59/FCD28 • Los Angeles, California
MB Docket 87-268 Seventh R&O Petition for Reconsideration

TCD OET-69 Interference Study for KCET-DT at 107 kW ERP (DA)
Using the FCD28 Appendix B Replication Pattern and Height
and Based on FCC OET-69 Software Using Default
FCC Values of 2 km x 2 km Cells and 1 Point/km Terrain Extraction

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Analysis of current record
Channel     Call           City/State        Application Ref. No.
   27      KEYT-TV    SANTA BARBARA CA          BDTV      -00000191

     Stations Potentially Affecting This Station

Chan   Call      City/State           Dist(km) Status  Application Ref. No.
 27   KTSF     SAN FRANCISCO CA          415.8  CP MOD BMPCDT    -20040727AEK
 28   KCET     LOS ANGELES CA            177.1  CP     BFRCET    -20050815ABG

 Total scenarios =   1


Result key:        1
Scenario        1  Affected station        1
Before Analysis

Results for: 27A CA SANTA BARBARA        BDTV      00000191     CP
   HAAT  917.0 m, ATV ERP  699.0 kW
                                  POPULATION   AREA (sq km)
   within Noise Limited Contour     1917281      54331.1
   not affected by terrain losses   1326978      42164.3
   lost to NTSC IX                        0          0.0
   lost to additional IX by ATV          28          8.1
   lost to ATV IX only                   28          8.1
   lost to all IX                        28          8.1

 Potential Interfering Stations Included in above Scenario     1

27A CA SAN FRANCISCO        BMPCDT    20040727AEK  CP

After Analysis

Results for: 27A CA SANTA BARBARA        BDTV      00000191     CP
   HAAT  917.0 m, ATV ERP  699.0 kW
                                  POPULATION   AREA (sq km)
   within Noise Limited Contour     1917281      54331.1
   not affected by terrain losses   1326978      42164.3
   lost to NTSC IX                        0          0.0
   lost to additional IX by ATV       31448        100.9
   lost to ATV IX only                31448        100.9
   lost to all IX                     31448        100.9

 Potential Interfering Stations Included in above Scenario     1

27A CA SAN FRANCISCO        BMPCDT    20040727AEK  CP
28A CA LOS ANGELES          BFRCET    20050815ABG  CP

 The following station failed the de minimis interference criteria.
```

TV Station KCET • N28/D59/FCD28 • Los Angeles, California
MB Docket 87-268 Seventh R&O Petition for Reconsideration

TCD OET-69 Interference Study for KCET-DT at 107 kW ERP (DA)
Using the FCD28 Appendix B Replication Pattern and Height
and Based on FCC OET-69 Software Using Default
FCC Values of 2 km x 2 km Cells and 1 Point/km Terrain Extraction

```
 28D CA LOS ANGELES          BFRCET    20050815ABG
 ERP  107.00 kW  HAAT   913.0 m  RCAMSL  1812.0 m
 Antenna CDB 00000000070604

 Due to interference to the following station and scenario:     1
 27D CA SANTA BARBARA        BDTV      00000191
 ERP  699.00 kW  HAAT   917.0 m  RCAMSL  1265.0 m
 Antenna CDB 00000000074818

 Percent Service lost without proposal:     0.0  to BDTV      00000191
 Percent Service lost with proposal:        2.4  to BDTV      00000191


Worst case new IX    2.3678% Scenario      1

################################################################################


     Analysis of Interference to Affected Station   2


Analysis of current record
Channel     Call           City/State        Application Ref. No.
   28      KMPH-TV    VISALIA CA               BLCDT     -20030204AGN

     Stations Potentially Affecting This Station

Chan   Call      City/State           Dist(km) Status  Application Ref. No.
 28   KCET     LOS ANGELES CA           281.4  CP     BFRCET    -20050815ABG
 Proposal causes no interference

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     Analysis of Interference to Affected Station   3


Analysis of current record
Channel     Call           City/State        Application Ref. No.
   29      KFTR-TV    ONTARIO CA               BMPCDT    -20021028ABV

     Stations Potentially Affecting This Station

Chan   Call      City/State           Dist(km) Status  Application Ref. No.
 28   KCET     LOS ANGELES CA             0.5  CP     BFRCET    -20050815ABG
 29   KVCW     LAS VEGAS NV             341.4  LIC    BLCDT     -20070109AAW
 30   KPBS     SAN DIEGO CA             199.7  LIC    BLEDT     -20011203CEP

 Total scenarios =   1
```

TV Station KCET • N28/D59/FCD28 • Los Angeles, California
MB Docket 87-268 Seventh R&O Petition for Reconsideration

TCD OET-69 Interference Study for KCET-DT at 107 kW ERP (DA)
Using the FCD28 Appendix B Replication Pattern and Height
and Based on FCC OET-69 Software Using Default
FCC Values of 2 km x 2 km Cells and 1 Point/km Terrain Extraction

```
Result key:        2
Scenario        1  Affected station        3
Before Analysis

Results for: 29A CA ONTARIO              BMPCDT    20021028ABV  CP
   HAAT  937.0 m, ATV ERP  400.0 kW
                                  POPULATION   AREA (sq km)
   within Noise Limited Contour    16227698      42848.9
   not affected by terrain losses  15122763      33144.0
   lost to NTSC IX                        0          0.0
   lost to additional IX by ATV      101310        200.3
   lost to ATV IX only               101310        200.3
   lost to all IX                    101310        200.3

 Potential Interfering Stations Included in above Scenario     1

30A CA SAN DIEGO            BLEDT     20011203CEP  LIC

After Analysis

Results for: 29A CA ONTARIO              BMPCDT    20021028ABV  CP
   HAAT  937.0 m, ATV ERP  400.0 kW
                                  POPULATION   AREA (sq km)
   within Noise Limited Contour    16227698      42848.9
   not affected by terrain losses  15122763      33144.0
   lost to NTSC IX                        0          0.0
   lost to additional IX by ATV      178386        316.4
   lost to ATV IX only               178386        316.4
   lost to all IX                    178386        316.4

 Potential Interfering Stations Included in above Scenario     1

30A CA SAN DIEGO            BLEDT     20011203CEP  LIC
28A CA LOS ANGELES          BFRCET    20050815ABG  CP

 The following station failed the de minimis interference criteria.
 28D CA LOS ANGELES          BFRCET    20050815ABG
 ERP  107.00 kW  HAAT   913.0 m  RCAMSL  1812.0 m
 Antenna CDB 00000000070604

 Due to interference to the following station and scenario:     1
 29D CA ONTARIO              BMPCDT    20021028ABV
 ERP  400.00 kW  HAAT   937.0 m  RCAMSL  1820.0 m
 Antenna CDB 00000000068117

 Percent Service lost without proposal:     0.0  to BMPCDT    20021028ABV
 Percent Service lost with proposal:        0.5  to BMPCDT    20021028ABV
```

TV Station KCET • N28/D59/FCD28 • Los Angeles, California
MB Docket 87-268 Seventh R&O Petition for Reconsideration

TCD OET-69 Interference Study for KCET-DT at 107 kW ERP (DA)
Using the FCD28 Appendix B Replication Pattern and Height
and Based on FCC OET-69 Software Using Default
FCC Values of 2 km x 2 km Cells and 1 Point/km Terrain Extraction

```
Worst case new IX    0.5131% Scenario      1

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     Analysis of Interference to Affected Station   4


Analysis of current record
Channel     Call           City/State        Application Ref. No.
   28      KCET       LOS ANGELES CA            BFRCET    -20050815ABG

     Stations Potentially Affecting This Station

Chan   Call      City/State           Dist(km) Status  Application Ref. No.
 27   KEYT-TV  SANTA BARBARA CA          177.1  CP     BDTV      -00000191
 28   KMPH-TV  VISALIA CA                281.4  LIC    BLCDT     -20030204AGN
 29   KFTR-TV  ONTARIO CA                  0.5  CP     BMPCDT    -20021028ABV

 Total scenarios =   1


Result key:        3
Scenario        1  Affected station        4
Before Analysis

Results for: 28A CA LOS ANGELES          BFRCET    20050815ABG  CP
   HAAT  913.0 m, ATV ERP  107.0 kW
                                 POPULATION   AREA (sq km)
   within Noise Limited Contour    15712511      29049.6
   not affected by terrain losses  14600334      22587.0
   lost to NTSC IX                        0          0.0
   lost to additional IX by ATV      294943        640.7
   lost to ATV IX only               294943        640.7
   lost to all IX                    294943        640.7

 Potential Interfering Stations Included in above Scenario     1

27A CA SANTA BARBARA        BDTV      00000191     CP
29A CA ONTARIO              BMPCDT    20021028ABV  CP

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FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED
```

TCD OET-69 Interference Study for KCET-DT at 107 kW ERP (DA) Using the Existing Channel 28 Andrew Model 35E4 Transmitting Antenna Pattern and Height, and Based on FCC OET-69 Software Using Default FCC Values of 2 km x 2 km Cells and 1 Point/km Terrain Extraction

```
 Census data selected 2000

 Post Transition Data Base Selected
/space/software/cdbs/tvdb.sff_B
              TV INTERFERENCE and SPACING ANALYSIS PROGRAM


 Date: 10-22-2007    Time: 10:51:51

 Record Selected for Analysis

 KCETDT   USERRECORD-01               LOS ANGELES          CA US
 Channel 28 ERP 107.   kW   HAAT  954. m  RCAMSL 01826 m
 Latitude 034-13-26  Longitude 0118-03-43
 Status APP       Zone 2    Border
 Dir Antenna Make CDB  Model 00000000017555  Beam tilt N  Ref Azimuth 0.
 Last update          Cutoff date          Docket
 Comments
 Applicant



 Cell Size for Service Analysis 2.0 km/side

 Distance Increments for Longley-Rice Analysis 1.00 km


 Facility meets maximum height/power limits

    Azimuth     ERP        HAAT   41.0 dBu F(50,90)
     (Deg)      (kW)       (m)        (km)
      0.0       79.690     480.7       90.3
     45.0       26.750     424.2       79.9
     90.0       87.636     635.4      100.3
    135.0       27.729    1436.4      111.7
    180.0       24.796    1544.7      113.3
    225.0       24.654    1475.6      111.5
    270.0       16.798    1033.6       97.4
    315.0       92.743     600.0       99.4



                    Evaluation toward Class A Stations


No Spacing violations or contour overlap to Class A stations


                    Class A Evaluation Complete
```

TCD OET-69 Interference Study for KCET-DT at 107 kW ERP (DA) Using the Existing Channel 28 Andrew Model 35E4 Transmitting Antenna Pattern and Height, and Based on FCC OET-69 Software Using Default FCC Values of 2 km x 2 km Cells and 1 Point/km Terrain Extraction

SPACING VIOLATION FOUND BETWEEN STATION

KCETDT 28 LOS ANGELES CA USERRECORD01

and station

SHORT TO: KCET 28 LOS ANGELES CA BFRCET 20050815ABG
034-13-26 0118-03-43
Req. separation 223.7 Actual separation 0.0 Short 223.7 km

LANDMOBILE SPACING VIOLATIONS FOUND

NONE

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quite zone

Proposed facility OK toward Table Mountian

Proposed facility is beyond the Canadian coordination distance

Proposed facility is within the Mexican coordination distance
Distance to border = 207.0km

Proposed station is OK toward AM broadcast stations

****

Start of Interference Analysis

Proposed Station			
Channel	Call	City/State	ARN
28	KCETDT	LOS ANGELES CA	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
27	KEYT-TV	SANTA BARBARA CA	177.1	CP	BDTV	-00000191
28	KMPH-TV	VISALIA CA	281.5	LIC	BLCDT	-20030204AGN
29	KFTR-TV	ONTARIO CA	0.5	CP	BMPCDT	-20021028ABV

TCD OET-69 Interference Study for KCET-DT at 107 kW ERP (DA) Using the Existing Channel 28 Andrew Model 35E4 Transmitting Antenna Pattern and Height, and Based on FCC OET-69 Software Using Default FCC Values of 2 km x 2 km Cells and 1 Point/km Terrain Extraction

%%%

Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
27	KEYT-TV	SANTA BARBARA CA	BDTV	-00000191

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
27	KTSF	SAN FRANCISCO CA	415.8	CP MOD	BMPCDT	-20040727AEK
28	KCETDT	LOS ANGELES CA	177.1	APP	USERRECORD-01	

Total scenarios = 1

Result key: 1
Scenario 1 Affected station 1
Before Analysis

Results for: 27A CA SANTA BARBARA BDTV 00000191 CP
HAAT 917.0 m, ATV ERP 699.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1917281	54331.1
not affected by terrain losses	1326978	42164.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	28	8.1
lost to ATV IX only	28	8.1
lost to all IX	28	8.1

Potential Interfering Stations Included in above Scenario 1

27A CA SAN FRANCISCO BMPCDT 20040727AEK CP

After Analysis

Results for: 27A CA SANTA BARBARA BDTV 00000191 CP
HAAT 917.0 m, ATV ERP 699.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1917281	54331.1
not affected by terrain losses	1326978	42164.3
lost to NTSC IX	0	0.0
lost to additional IX by ATV	7383	68.6
lost to ATV IX only	7383	68.6
lost to all IX	7383	68.6

Potential Interfering Stations Included in above Scenario 1

TCD OET-69 Interference Study for KCET-DT at 107 kW ERP (DA) Using the Existing Channel 28 Andrew Model 35E4 Transmitting Antenna Pattern and Height, and Based on FCC OET-69 Software Using Default FCC Values of 2 km x 2 km Cells and 1 Point/km Terrain Extraction

```
27A CA SAN FRANCISCO        BMPCDT    20040727AEK  CP
28A CA LOS ANGELES          USERRECORD01           APP

Percent new IX =    0.5543%

Worst case new IX    0.5543% Scenario      1

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     Analysis of Interference to Affected Station   2


Analysis of current record
Channel     Call           City/State        Application Ref. No.
   28      KMPH-TV    VISALIA CA               BLCDT     -20030204AGN

     Stations Potentially Affecting This Station

Chan   Call      City/State           Dist(km) Status  Application Ref. No.
 28   KCETDT   LOS ANGELES CA            281.5  APP    USERRECORD-01
 Proposal causes no interference

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     Analysis of Interference to Affected Station   3


Analysis of current record
Channel     Call           City/State        Application Ref. No.
   29      KFTR-TV    ONTARIO CA               BMPCDT    -20021028ABV

     Stations Potentially Affecting This Station

Chan   Call      City/State           Dist(km) Status  Application Ref. No.
 29   KVCW     LAS VEGAS NV              341.4  LIC    BLCDT     -20070109AAW
 30   KPBS     SAN DIEGO CA              199.7  LIC    BLEDT     -20011203CEP
 28   KCETDT   LOS ANGELES CA              0.5  APP    USERRECORD-01

 Total scenarios =   1


Result key:        2
Scenario        1  Affected station        3
Before Analysis

Results for: 29A CA ONTARIO              BMPCDT    20021028ABV  CP
   HAAT  937.0 m, ATV ERP  400.0 kW
```

TCD OET-69 Interference Study for KCET-DT at 107 kW ERP (DA) Using the Existing Channel 28 Andrew Model 35E4 Transmitting Antenna Pattern and Height, and Based on FCC OET-69 Software Using Default FCC Values of 2 km x 2 km Cells and 1 Point/km Terrain Extraction

```
                                POPULATION   AREA (sq km)
   within Noise Limited Contour    16227698      42848.9
   not affected by terrain losses  15122763      33144.0
   lost to NTSC IX                        0          0.0
   lost to additional IX by ATV      101310        200.3
   lost to ATV IX only               101310        200.3
   lost to all IX                    101310        200.3

 Potential Interfering Stations Included in above Scenario     1

30A CA SAN DIEGO            BLEDT     20011203CEP  LIC

After Analysis

Results for: 29A CA ONTARIO              BMPCDT    20021028ABV  CP
   HAAT  937.0 m, ATV ERP  400.0 kW
                                POPULATION   AREA (sq km)
   within Noise Limited Contour    16227698      42848.9
   not affected by terrain losses  15122763      33144.0
   lost to NTSC IX                        0          0.0
   lost to additional IX by ATV      118080        272.4
   lost to ATV IX only               118080        272.4
   lost to all IX                    118080        272.4

 Potential Interfering Stations Included in above Scenario     1

30A CA SAN DIEGO            BLEDT     20011203CEP  LIC
28A CA LOS ANGELES          USERRECORD01           APP

Percent new IX =    0.1116%

Worst case new IX    0.1116% Scenario      1

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     Analysis of Interference to Affected Station   4


Analysis of current record
Channel     Call           City/State        Application Ref. No.
   28      KCETDT     LOS ANGELES CA            USERRECORD-01

     Stations Potentially Affecting This Station

Chan   Call      City/State           Dist(km) Status  Application Ref. No.
 27   KEYT-TV  SANTA BARBARA CA          177.1  CP     BDTV      -00000191
 28   KMPH-TV  VISALIA CA                281.5  LIC    BLCDT     -20030204AGN
 29   KFTR-TV  ONTARIO CA                  0.5  CP     BMPCDT    -20021028ABV
```

TCD OET-69 Interference Study for KCET-DT at 107 kW ERP (DA) Using the Existing Channel 28 Andrew Model 35E4 Transmitting Antenna Pattern and Height, and Based on FCC OET-69 Software Using Default FCC Values of 2 km x 2 km Cells and 1 Point/km Terrain Extraction

```
 Total scenarios =   1


Result key:        3
Scenario        1  Affected station        4
Before Analysis

Results for: 28A CA LOS ANGELES          USERRECORD01           APP
   HAAT  954.0 m, ATV ERP  107.0 kW
                                  POPULATION   AREA (sq km)
   within Noise Limited Contour    15321195      33447.3
   not affected by terrain losses  14020515      23784.0
   lost to NTSC IX                        0          0.0
   lost to additional IX by ATV       60643        324.1
   lost to ATV IX only                60643        324.1
   lost to all IX                     60643        324.1

 Potential Interfering Stations Included in above Scenario     1

27A CA SANTA BARBARA        BDTV      00000191     CP
28A CA VISALIA              BLCDT     20030204AGN  LIC
29A CA ONTARIO              BMPCDT    20021028ABV  CP

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Certificate of Service

I, Cynthia T. Miller, do hereby certify that I have this 26th day of October, 2007, caused to be sent by first class mail, postage prepaid, the attached Petition for Reconsideration of Community Television of Southern California to:

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Dow, Lohnes & Albertson
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/s/

Cynthia T. Miller

* By first-class mail and e-mail.